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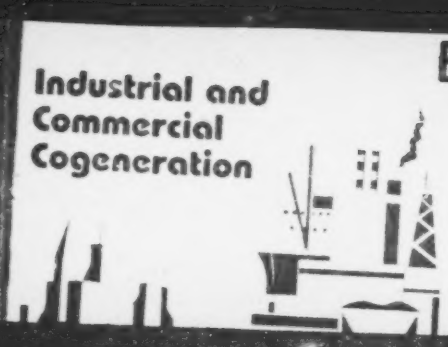

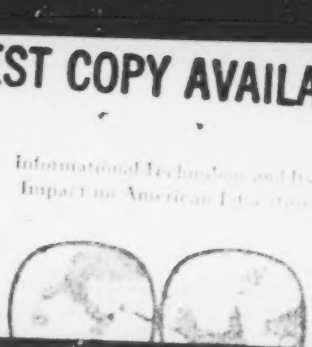

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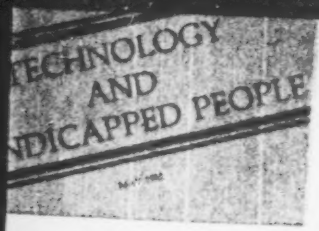

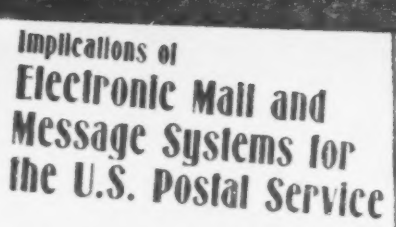

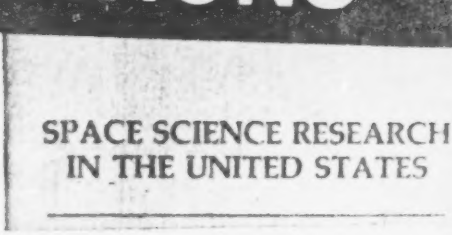

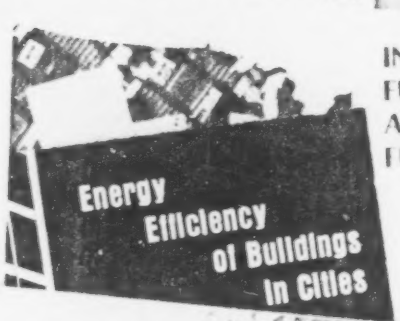

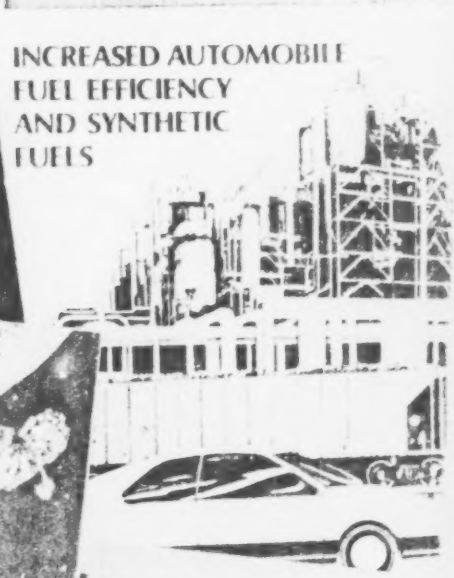

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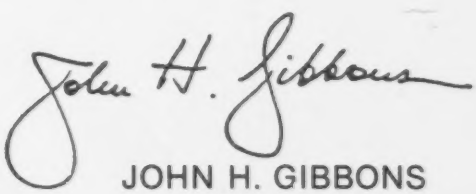
Preface

The Office of Technology Assessment (OTA) was established by Congress to provide committees with analytical assistance on difficult issues which involve science and technology. Governed by a bipartisan, bicameral congressional board, OTA provides a variety of services to the Senate and House on a broad range of issues. Services run the gamut from testimony and briefings to major assessments requiring up to 2 years to complete. OTA makes technical findings, identifies and describes options, but does not advocate particular policies.

OTA's multidisciplinary staff plans, directs, and drafts all assessments. It draws extensively on the broad technical and professional resources of the private sector, including the universities, research organizations, industry, and public interest groups.

The publications listed in this brochure are the result of various assessments and analyses requested by the committees of Congress. This listing, organized by OTA Program area, will be revised periodically as further reports are published by OTA.



JOHN H. GIBBONS
Director

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Contents

	Page
General Information	iv
Categories of Reports Issued by OTA	iv
How To Obtain OTA Publications	iv
Ordering Information	v
Publication Category	
Energy, Materials, and International Security	1
Energy	1
Materials	7
International Security and Commerce	11
Health and Life Sciences	14
Health	14
Food and Renewable Resources	20
Biological Applications	22
Science, Information, and Natural Resources	24
Communication and Information Technologies	24
Oceans and Environment	26
Space, Transportation, and Innovation	30
Specialized Reports	37
Administrative	39
NTIS Order Form	40
GPO Order Form	42

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Categories of Reports Issued by OTA

OTA Reports are the principal documentation of formal assessment projects. These projects are approved in advance by the Technology Assessment Board. At the conclusion of a project, the Board has the opportunity to review the report but its release does not necessarily imply endorsement of the results by the Board or its individual members.

OTA Technical Memoranda are issued on specific subjects analyzed in recent OTA reports or in projects presently in process at OTA. They are issued at the request of committees or Members of Congress who are engaged in committee legislative actions that are expected to be resolved before OTA completes its assessment.

OTA Background and Staff Papers are documents that contain information believed to be useful to various parties. The information undergirds formal OTA assessments or is an outcome of internal exploratory planning and evaluation. The material is usually not of immediate policy interest such as is contained in an OTA Report or Technical Memorandum, nor does it present options for Congress to consider.

How To Obtain OTA Publications

Most OTA publications listed in this brochure are available for sale through the Government Printing Office (GPO) and/or the National Technical Information Service (NTIS). In addition, many of OTA's reports are being reprinted by private publishers. They are described in the listings where applicable and can be ordered direct. Most OTA reports are also distributed automatically to approximately 700 Regional Depository Libraries throughout the country and may be included in the Government Documents collection of university and public libraries in your area. Please consult your librarian for additional information.

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Documents can be ordered from NTIS in either paper or microfiche format. Prices listed for NTIS copies refer to paper copies. All NTIS reports purchased in microfiche are $4.00. The order number for both paper copy or microfiche (PB XX-XXX XXX) is the same.

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Energy, Materials, & International Security

ENERGY

Industrial and Commercial Cogeneration

Examines the role that cogenerators could play in providing electric and thermal energy for industrial and commercial facilities; reviews the economic, environmental, social, and institutional consequences of cogeneration; and analyzes policy options that Congress may wish to consider.

Industrial and Commercial Cogeneration. OTA-E-192, February 1983; vii, 299 pages. GPO stock #052-003-00899-8; $8.50.

Summary, Industrial and Commercial Cogeneration. OTA-E-193, February 1983; 28 pages. Available free from OTA Publishing Office.

Increased Automobile Fuel Efficiency and Synthetic Fuels

Assesses and compares increased automobile fuel efficiency and synthetic fuels production with respect to their potential to reduce conventional oil consumption, and their costs and impacts.

Increased Automobile Fuel Efficiency and Synthetic Fuels: Alternatives for Reducing Oil Imports. OTA-E-185, September 1982; ix, 293 pages. GPO stock #052-003-00889-1; $8.50. NTIS order #PB 83-126 094; $23.50.

Summary, Increased Automobile Fuel Efficiency and Synthetic Fuels: Alternatives for Reducing Oil Imports. OTA-E-186, September 1982; 39 pages. Available free from OTA Publishing Office.

Background Paper #1: Synthetic Fuels for Transportation: The Future Potential of Electric and Hybrid Vehicles. OTA-BP-E-13, March 1982; xii, 219 pages. GPO stock #052-003-00862-9; $7.00. NTIS order #PB 83-126 086; $20.50.

Background Paper #2: Selected Technical and Economic Comparisons of Synfuel Options. October 1982; ix, 236 pages. NTIS order #PB 83-147 363; $22.00.

Background Paper #3: Environmental Issues of Synthetic Transportation Fuels From Coal. November 1982; v, 101 pages. NTIS order #PB 83-161 851; $13.00.

Background Paper #4: Environmental Issues of Synthetic Transportation Fuels From Coal. December 1982; viii, 198 pages. NTIS order # PB 83-161 919; $25.00.

Background Paper #5: Water Availability for Synthetic Fuels: An Assessment of Current Studies. October 1982; viii, 141 pages. NTIS order #PB 83-152 645; $16.00.

Solar Power Satellite Systems

Identifies and analyzes the key issues that need resolution before decisions whether or not to develop major solar power satellite systems can be made.

Solar Power Satellite Systems and Issues. OTA-E-144, August 1981; viii, 298 pages. GPO stock #052-003-00848-3; $8.50. NTIS order #PB 82-108 846; $22.50.

Summary, Solar Power Satellite Systems and Issues. OTA-E-145, August 1981; 24 pages. Available free from OTA Publishing Office.

Nuclear Powerplant Standardization

Provides the essential background material for a broad understanding of the nuclear industry, its institutions and their relationship to standardization to improve both safety and licensability.

Nuclear Powerplant Standardization: Light Water Reactors. OTA-E-134, April 1981; ix, 63 pages. GPO stock #052-003-00808-4; $4.75. NTIS order #PB 81-213 589; $9.00.

Nuclear Powerplant Standardization: Light Water Reactors, Vol. II: Appendixes, Parts A and B. 436 pages. NTIS order #PB 81-240 897; $31.50.

World Petroleum Availability

Examines prospects for world oil supplies and production in coming decades. Analyzes country-by-country supply prospects and the potential for new discoveries, and estimates what these countries will actually produce.

World Petroleum Availability: 1980-2000—A Technical Memorandum. OTA-TM-E-5, October 1980; vii, 88 pages. GPO stock #052-003-00781-9; $4.75. NTIS order #PB 81-145 252; $10.50. Also available in paperback for $10.00 from McGraw-Hill, Energy Information Services, Rm. 4249, 1221 Avenue of the Americas, New York, N.Y. 10020.

Biomass

Evaluates the energy potential of plant and animal matter (biomass), concentrating on four biomass fuel cycles—wood, alcohol fuels, grasses and crop residues, and animal wastes. Describes biomass' place in two plausible energy futures and discusses policy options.

Energy From Biological Processes. OTA-E-124, July 1980; x, 195 pages. GPO stock #052-003-00762-2; $7.00. NTIS order #PB 80-211 477; $18.00. Also available in hardback for $24.00 under the title "Energy From Biological Processes: Technical and Policy Options" from Westview Press, Sales Dept., 5500 Central Ave., Boulder, Colo. 80301.

Summary, Energy From Biological Processes. OTA-E-123, July 1980; 23 pages. Available free from OTA Publishing Office.

Volume II: Technical and Environmental Analyses, Energy From Biological Processes. Presents the technical and environmental analyses of the resource base, conversion technologies, and end uses on which the conclusions in volume I are based. OTA-E-128, September 1980; vii,

234 pages. GPO stock #052-003-00782-7; $7.50. NTIS order #PB 81-134 769; $19.50. Also available in hardback for $26.50 from Ballinger Publishing Co., 17 Dunster St., Harvard Square, Cambridge, Mass. 02138. Also available in paperback for $18.00 from McGraw-Hill, Energy Information Services, Rm. 4249, 1221 Avenue of the Americas, New York, N.Y. 10020.

Volume III: Appendixes, Energy From Biological Processes—Parts A through C. Available from NTIS:

Volume III—Part A: Energy From Wood. Contents: Background; Supply; Recovery Technology; Economics; Environmental Impacts; Incentives and Disincentives. 161 pages. NTIS order #PB 81-134 777; $28.50.

Volume III—Part B: Agriculture, Unconventional Crops, and Selected Biomass Wastes. Contents: The Potential of Producing Energy From Agriculture; Cropland Availability for Biomass Production; Energy From Agriculture: Unconventional Crops; Energy From Aquaculture Biomass System: Fresh and Brackish Water Aquatic Plants; Energy From Agriculture: Animal Wastes; Energy From Agriculture: Agriculture Processing Wastes. 728 pages. NTIS order #PB 81-134 785. Contact NTIS for price.

Volume III—Part C: Select Conversion Technologies and End Use. Contents: End Use of Fluids From Biomass as Energy Resources in Both Transportation and Nontransportation Sectors, Thermochemical Conversion of Biomass: The Scientific Aspects; Engineering Aspects of Thermochemical Conversion; Biological Production of Gas. 321 pages. NTIS order #PB 81-134 793. Contact NTIS for price.

DOE Conservation and Solar Programs

Analyzes the progress and direction of five major conservation and solar energy programs of the U.S. Department of Energy to provide an overview of their balance and long-range potential, and whether they reflect administration and congressional goals.

Conservation and Solar Energy Programs of the Department of Energy—A Critique. OTA-E-120, June 1980; vii, 80 pages. GPO stock #052-003-00757-6; $4.75. NTIS order #PB 80-197 759; $10.50.

Alternative Energy Futures

To be published in several parts, the assessment defines a number of possible energy supply-and-demand scenarios and the major issues that cut across all such futures, examines their economic and technological implications, and analyzes the basic policy issues associated with implementing these futures.

Part 1: The Future of Liquefied Natural Gas Imports. Evaluates projected U.S. demand, global availability, cost and financing, and security of foreign supplies. OTA-E-110, March 1980; xii, 126 pages. GPO stock #052-003-00743-6; $6.00. NTIS order #PB 80-173 552; $13.50.

Summary, Part 1: The Future of Liquefied Natural Gas Imports. OTA-E-109, March 1980; 23 pages. Available free from OTA Publishing Office.

Part 1: Background Reports, The Future of Liquefied Natural Gas Imports. March 1980, 242 pages. NTIS order #PB 80-203 847; $31.50.

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Part 2: The Energy Efficiency of Buildings in Cities. Focuses on the interaction of technology and policy for new and existing residential and commercial buildings in U.S. cities for the next two decades. OTA-E-168, March 1982; vii, 361 pages. GPO stock #052-003-00871-8; $9.00. NTIS order #PB 82-200 346; $27.00.

Summary, Part 2: The Energy Efficiency of Buildings in Cities. OTA-E-169, March 1982; 27 pages. Available free from OTA Publishing Office.

Gasohol

Discusses the technology and economics of gasohol production, and examines the environmental, social, and institutional impacts of its use as a transportation fuel.

Gasohol: A Technical Memorandum. OTA-TM-E-1, September 1979; viii, 71 pages. GPO stock #052-003-00706-1; $5.50. NTIS order #PB 80-105 885; $10.50.

Residential Energy Conservation

Examines the prospects of existing and new technologies for reducing energy consumption in homes, as well as the effectiveness of Federal programs and policies for achieving energy conservation in residences.

Residential Energy Conservation. OTA-E-92, July 1979; vii, 355 pages. GPO stock #052-003-00691-0; $9.00. NTIS order #PB 298 410; $27.00. Also available in hardback for $15.00 under the title "Energy Conservation Techniques for Homes and Other Structures" from Allanheld, Osmun & Co., 81 Adams Dr., Totowa, N.J. 07512.

Volume II: Working Papers, Residential Energy Conservation. OTA-E-87, April 1979; vii, 615 pages. NTIS order #PB 80-162 829; $43.50.

The Direct Use of Coal

Assesses the prospects as well as the environmental, health, safety, and other problems of mining and burning significantly more coal than now. Also examines the complete coal system from extraction to combustion, including the key steps and institutions that policy can influence.

The Direct Use of Coal: Prospects and Problems of Production and Combustion. OTA-E-86, April 1979; vi, 411 pages. GPO stock #052-003-00664-2; $10.00. NTIS order #PB 295 797; $31.50. Also available in hardback for $29.50 from Ballinger Publishing Co., 17 Dunster St., Harvard Square, Cambridge, Mass. 02138.

Volume II, Working Papers: The Direct Use of Coal—Parts A through D. Available from NTIS:

Volume II—Part A. Contents: Selected Topics in Estimating Future Energy Demand and Supply; Rethinking the Scale of Coal-Fired Electric Generation; Residential and Commercial Uses of Coal; Coal Cleaning and Desulfurization; Miners and Operators Collective Bargaining in Coal. 586 pages. NTIS order #PB 80-184 518; $39.00.

Volume II—Part B. Contents: Environmental Considerations for Increased Coal Utilization; Transport and Fate of Sulfur and Other Air

Pollutants; Prediction and Review of Air Pollution Health Effects From Direct Coal Combustion. 594 pages. NTIS order #PB 80-184 526; $42.00.

Volume II—Part C. Contents: Effects on Plants of Sulfur Pollutants From Coal Combustion; Coal Mine Health; Social and Economic Impacts of Coal Production in the Eastern U.S.; Impacts of Coal Development on Western Communities; Public Attitudes Toward Coal-Fired Powerplants. 534 pages. NTIS order #PB 80-184 534; $37.50.

Volume II—Part D. Contents: Federal Coal Leasing Policy; Laws Applicable to Air Emissions From Direct Use of Coal; Surface Mining Control and Reclamation Act of 1977. 420 pages. NTIS order #PB 80-184 542; $30.00.

Onsite Solar Energy

Evaluates the economic, technical, and environmental impacts of solar energy systems located at the point of use. Also discusses legal and regulatory concerns, various technologies, energy storage problems, and alternative Federal policies for supporting the development of onsite solar technology.

Volume I: Application of Solar Technology to Today's Energy Needs. OTA-E-66, June 1978; vii, 525 pages. GPO stock #052-003-00539-5; $11.00. NTIS order #PB 283 770; $36.00.

Volume II: Application of Solar Technology to Today's Energy Needs—Describes the vast array of systems for providing onsite solar energy as well as the methodology for evaluating the economic and technical merits of those systems. OTA-E-77, September 1978; vii, 764 pages. GPO stock #052-003-00608-1; $12.00. NTIS order #PB 289 762. Contact NTIS for price.

Coal Slurry Pipelines

Compares the cost of transporting coal by slurry pipelines to rail for certain routes, and assesses the impact of the proposed pipelines on the railroad industry as well as on water supplies in the Western United States.

A Technology Assessment of Coal Slurry Pipelines. OTA-E-60, March 1978; xv, 155 pages. GPO stock #052-003-00523-9; $6.50. NTIS order #PB 278 675; $15.00.

Summary, A Technology Assessment of Coal Slurry Pipelines. OTA-E-127, September 1980; 27 pages. Available free from OTA Publishing Office.

Task Reports: Coal Slurry Pipelines, Vol. II, Part I, January 1978. NTIS order #PB 278 676; $36.50. Vol. II, Part 2, January 1978. NTIS order #PB 278 677. Contact NTIS for price.

Enhanced Oil Recovery

Assesses the potential for increasing domestic production of oil by applying developing technologies to known reservoirs.

Enhanced Oil Recovery Potential in the United States. OTA-E-59, January 1978; xii, 238 pages. NTIS order #PB 276 594; $19.50. Also available in paperback for $18.00 from McGraw-Hill, Energy Informa-

tional Services, Rm. 4249, 1221 Avenue of the Americas, New York, N.Y. 10020.

Devonian Shale Gas

Analyzes the potential for producing gas from Devonian shales of the Appalachian Basin using existing technologies under a variety of economic assumptions.

Gas Potential From Devonian Shales of the Appalachian Basin. OTA-E-57, November 1977; xii, 81 pages. GPO stock #052-003-00500-0; $5.50. NTIS order #PB 274 856; $10.50.

National Energy Plan

Provides an evaluation of the Administration's energy plan and its impact on energy supply, energy demand, and society.

Appendix I—measures the magnitude of the energy problem.

Appendix II—analyzes the effect of energy price changes on the supply of fossil fuel.

Analysis of the Proposed National Energy Plan. OTA-E-51, August 1977; xiii, 243 pages. NTIS order #PB 273 148; $19.50.

Nuclear Proliferation

Examines several nuclear power fuel cycles and ancillary enrichment and reprocessing technologies for their impact on the risks of the proliferation of nuclear weapons to nations or other groups that do not now possess them.

Nuclear Proliferation and Safeguards. OTA-E-48, June 1977; xiii, 270 pages. Available from Praeger Publishing Co., New York, N.Y. Please direct all purchase orders to Holt, Rinehart and Winston, 383 Madison Avenue, New York, N.Y. 10017, $21.50, hardbound. NTIS order #PB 275 843; $21.00.

Summary, Nuclear Proliferation and Safeguards. OTA-E-148, March 1982; 47 pages. Available free from OTA Publishing Office.

Volume II, Appendix: Nuclear Proliferation and Safeguards—Parts One and Two. Two part volume containing background data for OTA's assessment report on Nuclear Proliferation and Safeguards. OTA-E-50, June 1977; vii, 1,051 pages. Vol. II, Part I: NTIS order #PB 275 844; $40.50. Vol. II, Part 2: NTIS order #PB 275 845; $39.00.

Environmental Research Plans

Reviews the ability of the U.S. Environmental Protection Agency to anticipate environmental problems, given the day-to-day demands of its regulatory responsibilities, as evidenced in the research plans submitted by EPA to Congress in February 1976.

A Review of the U.S. Environmental Protection Agency's Environmental Research Outlook, FY 1976 Through 1980. OTA-E-32, August 1976; xi, 122 pages. NTIS order #PB 258 191; $12.00.

Comparative Analysis: Revised ERDA Plan and Program

Compares the revised ERDA plan and program put forth in 1976 with the earlier 1975 document and evaluates, among other issues, the increased emphasis given to energy conservation and the nontechnological aspects of energy production.

Comparative Analysis of the 1976 ERDA Plan and Program. OTA-E-28, May 1976; ix, 204 pages. NTIS order #PB 254 794; $18.00.

1975 ERDA Plan and Program

Analyzes 99 issues, ranging from nuclear safety to the research outlook for solar and other altenative energy systems, raised by the long-range plan and program developed by ERDA in 1975, "Creating Energy Choices for the Future."

An Analysis of the ERDA Plan and Program. OTA-E-12, October 1975; xii, 318 pages. NTIS order #PB 250 636; $25.50.

1975 ERDA Budget

Examines issues, such as nuclear v. nonnuclear energy sources and generation v. conservation research, in the first budget submitted by the newly organized U.S. Energy Research and Development Administration.

An Analysis Identifying Issues in the Fiscal Year 1976 ERDA Budget. #2, March 1975; xxiii, 84 pages. NTIS order #PB 244 863; $12.00.

Natural Gas Curtailments

Assesses the impact on residential and business consumers of the 18-percent shortfall in natural gas supplies below contract requirements that was projected by the Federal Power Commission for the winter of 1975-76 and beyond.

An Analysis of the Impacts of the Projected Natural Gas Curtailments for the Winter 1975-76. OTA-E-13, November 1975; xiii, 29 pages. NTIS order #PB 250 623; $7.50.

MATERIALS

Hazardous Waste Control

Assesses the criteria for defining hazardous waste and for judging the relative health and environmental hazards of a given waste; evaluates technologies for cleaning up present waste disposal sites that are hazardous to health and the environment; technologies and approaches for the safe storage or disposal of hazardous waste; and technologies and approaches for reducing the volume of hazardous waste.

Technologies and Management Strategies for Hazardous Waste Control. OTA-M-196, March 1983; viii, 407 pages. GPO stock #052-003-00901-3; $8.50.

Summary, Technologies and Management Strategies for Hazardous Waste Control. OTA-M-197, March 1983; 55 pages. Available free from OTA Publishing Office.

Development and Production Potential of Federal Coal Leases

Analyzes all mining activities on Federal leases, examines the present and development potential value of outstanding leases, estimates revenues to the Federal Government, and the feasibility of using deep-mining technology in leased areas.

An Assessment of Development and Production Potential of Federal Coal Leases. OTA-M-150, December 1981; ix, 473 pages. GPO stock #052-003-00851-3; $10.00. NTIS order #PB 82-149 378; $34.50.

Summary, An Assessment of Development and Production Potential of Federal Coal Leases. OTA-M-151, November 1981; 44 pages. Available free from OTA Publishing Office.

Federal Coal Lease Ownership

Traces the history of the 538 Federal coal leases in existence at the end of 1979, and identifies the participants in the Federal coal leasing program between 1950 and 1980.

Patterns and Trends in Federal Coal Lease Ownership, 1950-80 —A Technical Memorandum. OTA-TM-M-7, March 1981; vi, 76 pages. NTIS order #PB 81-188 484; $10.50.

Nonnuclear Industrial Hazardous Waste

Reviews the nature and magnitude of hazardous waste disposal and abandoned site problems and assesses the reliability and efficacy of present containment, abatement, and disposal measures.

Nonnuclear Industrial Wastes: Classifying for Hazards Management —A Technical Memorandum. OTA-TM-M-9, November 1981; vii, 36 pages. GPO stock #052-003-00859-9; $3.00. NTIS order #PB 82-134 305; $7.50.

Technology and Steel Industry Competitiveness

Assesses how and when new technology can improve the international competitiveness of the U.S. steel industry, including the governmental and industrial barriers to creating and adopting technological innovations.

Technology and Steel Industry Competiveness. OTA-M-122, June 1980; vii, 374 pages. GPO stock #052-003-00760-6; $9.50. NTIS order #PB 80-208 200; $28.50.

Summary, Technology and Steel Industry Competitiveness. OTA-M-121, June 1980; 28 pages. Available free from OTA Publishing Office.

Oil Shale Technologies

Assesses the status and potential of technologies for the development of oil shale resources, including environmental and socioeconomic impacts, water demand and availability, and institutional and financial considerations. Includes a history and analysis of the Federal Prototype Oil Shale Leasing Program.

An Assessment of Oil Shale Technologies. OTA-M-118, June 1980; vii, 518 pages. NTIS order #PB 80-210 115; $36.00. Also available in paperback for $22.00 from McGraw-Hill, Energy Informational Services, Rm. 4249, 1221 Avenue of the Americas, New York, N.Y. 10020.

Summary, An Assessment of Oil Shale Technologies. OTA-M-117, June 1980; 31 pages. Available free from OTA Publishing Office.

Volume II: A History and Analysis of the Federal Prototype Oil Shale Leasing Programs. OTA-M-119, July 1980; viii, 81 pages. GPO stock #052-003-00763-1; $5.00. NTIS order #PB 80-210 123; $10.50.

Continuous Casting in the U.S. Steel Industry

Describes the continuous casting process, contrasts the rate of its adoption by U.S. and foreign steel industries, and examines the economic costs and benefits of accelerated conversion to this new technology.

Benefits of Increased Use of Continuous Casting by the U.S. Steel Industry—A Technical Memorandum. OTA-TM-ISC-2, October 1979; vii, 32 pages. NTIS order #PB 80-104 904; $7.50.

Conservation of Metals

Explores the kinds and amounts of waste that occur in U.S. use of eight critical metals and the technical options for reducing that waste.

Technical Options for Conservation of Metals: Case Studies of Selected Metals and Products. OTA-M-97, September 1979; x, 125 pages. GPO stock #052-003-00705-3; $6.00. NTIS order #PB 80-102 619; $13.50.

Volume II, Working Papers, Conservation of Metals—Parts II-A through II-F. Available from NTIS:

Volume II-A: A Preliminary Assessment of Options for Reducing Wastage of Materials. 125 pages. NTIS order #PB 80-170 343; $12.00.

Volume II-B: Flows of Selected Materials, 1974. 211 pages. NTIS order #PB 80-170 350; $18.00.

Volume II-C: Identification and Evaluation of Metal Conservation Approaches for Products. 278 pages. NTIS order #PB 80-110 935; $22.50.

Volume II-D: Alternative Methods for Implementing a Recycling Policy. 69 pages. NTIS order #PB 80-110 943; $9.00.

Volume II-E: Analysis of the Impacts of Changing Product Service Life and Material Content. 157 pages. NTIS order #PB 80-110 950; $15.00.

Volume II-F: Preliminary Technology Assessment of Materials Conservation Strategies. 231 pages. NTIS order #PB 80-110 968; $19.50.

Materials and Energy From Municipal Waste

Examines present and potential technologies for producing energy and recovering resources from municipal solid waste, and assesses the economic and institutional impacts of an expanded program of recycling and reuse.

Materials and Energy From Municipal Waste: Resource Recovery and Recycling From Municipal Solid Waste and Beverage Container Deposit Legislation. OTA-M-93, July 1979; viii, 284 pages. GPO stock #052-003-00692-8; $8.00. NTIS order #PB 300 849; $22.50.

Volume II, Working Papers: Materials and Energy From Municipal Waste—Resource Recovery and Recycling From Municipal Solid Waste and Beverage Container Deposit Legislation. OTA-M-69, July 1978; ix, 524 pages. NTIS order #PB 300 848; $37.50.

Management of Minerals in Federal Lands

Analyzes Federal laws and practices that govern the exploration, development, and production of fuel and nonfuel minerals in onshore Federal lands.

Management of Fuel and Nonfuel Minerals in Federal Lands. OTA-M-88, April 1979; x, 435 pages. GPO stock #052-003-00667-7; $11.00. NTIS order #PB 295 788; $31.50.

Access Across Federal Lands

Analyzes laws, regulations, and policies affecting access across federally owned lands to minerals on non-Federal lands, with special emphasis on Alaska.

Analysis of Laws Governing Access Across Federal Lands: Options for Access in Alaska. OTA-M-82, February 1979; xi, 260 pages. NTIS order #PB 293 982; $21.00.

Volume II, Working Papers: Analysis of Laws Governing Access Across Federal Lands—Options for Access in Alaska. OTA-M-76, September 1978; vii, 315 pages. NTIS order #PB 296 558; $24.00.

Chronic Materials Scarcity

Consists of the proceedings of a conference on national materials policy conducted by the Federation of Materials Societies from August 8-13, 1976, at Henniker, N.H. The conference examined the interrelationship of engineering and the policy implications of potential scarcities of various materials.

Engineering Implications of Chronic Materials Scarcity. OTA-M-44, April 1977; ix, 320 pages. NTIS order #PB 273 193; $25.50.

Materials Information Systems

Analyzes the ability of existing information systems, relied on by Government and business policymakers for data on the supply and demand for materials, to help avert future shortages and solve other materials-related problems.

An Assessment of Information System Capabilities Required To Support U.S. Materials Policy Decisions. OTA-M-40, December 1976; xv, 249 pages. NTIS order #PB 273 462; $19.50.

Alternative Stockpiling Policies

Assesses the social, political, and economic impacts of six alternative policies for stockpiling materials for purposes other than national security; for use, for example, in the event of sudden and unexpected shortages.

An Assessment of Alternative Economic Stockpiling Policies. OTA-M-36, August 1976; xiii, 327 pages. NTIS order #PB 273 191; $24.00.

National Materials Policy

Consists of the proceedings of a conference on a national materials policy sponsored by the Federation of Materials Societies from August 11-16, 1974, at Henniker, N.H.

Requirements for Fulfilling a National Materials Policy. OTA-M-4, August 1974; viii, 194 pages. NTIS order #PB 250 631; $18.00.

INTERNATIONAL SECURITY & COMMERCE

Competitiveness of U.S. Electronics Industry

Examines those major contributors to the competitiveness of the electronics industry that could most readily be affected by U.S. Government policy.

Impact of Technology on Competitiveness of U.S. Electronics Industry. In press, OTA-ISC-200. Contact OTA Publishing Office for further information.

Summary, Impact of Technology on Competitiveness of U.S. Electronics Industry. In press, OTA-ISC-201. Available free from OTA Publishing Office.

Technology and Soviet Energy Availability

Analyzes and identifies various levels of availability of U.S. and other Western energy technology. Examines the impact of availability on Soviet energy production to 1990 and discusses the policy options available to the Soviets by way of other Warsaw Pact countries, the Western importers of Soviet energy, and the Middle East.

Technology and Soviet Energy Availability. OTA-ISC-153, November 1981; vii, 405 pages. GPO stock #052-003-00858-1; $10.00. NTIS order #PB 82-133 455; $30.00.

Summary, Technology and Soviet Energy Availability. OTA-ISC-154, November 1981; 28 pages. Available free from OTA Publishing Office.

18-105 O - 83 - 3 : QL 3

MX Missile Basing

Assesses the technical feasibility, strategic utility, cost, impact on the region, and future consequences of various MPS-basing modes, and of alternative missile-basing modes that merit serious attention.

MX Missile Basing. OTA-ISC-140, September 1981; vii, 335 pages. GPO stock #052-003-00849-1; $9.00. NTIS order #PB 82-108 077; $25.50.

Summary, MX Missile Basing. OTA-ISC-139, June 1981; 52 pages. Available free from OTA Publishing Office.

U.S. Industrial Competitiveness

Compares the international competitiveness of three U.S. industries —steel, electronics, and automobiles—and evaluates the prospects for better integration of policies affecting industries in the United States.

U.S. Industrial Competitiveness—A Comparison of Steel, Electronics, and Automobiles. OTA-ISC-135, June 1981; x, 206 pages. GPO stock #052-003-00814-9; $7.00. NTIS order #PB 81-235 749; $18.00.

Summary, U.S. Industrial Competitiveness—A Comparison of Steel, Electronics, and Automobiles. OTA-ISC-136, June 1981; 28 pages. Available free from OTA Publishing Office.

Taggants in Explosives

Assesses the technical feasibility, safety ramifications, costs, and law enforcement utility of a proposal to require that commercial explosives be manufactured with "identification taggants" (designed to survive an explosion and trace the source of the explosives) and "detection taggants" (designed to allow a suitable machine to sense the presence of explosives inside a suitcase, package, etc.).

Taggants in Explosives. OTA-ISC-116, April 1980; vii, 263 pages. GPO stock #052-003-00747-9; $8.00. NTIS order #PB 80-192 719; $21.00.

Summary, Taggants in Explosives. OTA-ISC-115, April 1980; 31 pages. Available free from OTA Publishing Office.

Technology and East-West Trade

Examines the economic, military, and political implications of technology transfer to the Communist world; reviews existing policies and regulations governing this transfer; and discusses the issues and options in increased East-West trade.

Technology and East-West Trade. OTA-ISC-101, November 1979; viii, 303 pages. NTIS order #PB 80-119 381; $22.50. Also available in hardback for $25.00 from Allanheld, Osmun & Co., 81 Adams Dr., Totowa, N.J. 07512.

Effects of Nuclear War

Examines the social, economic, political, and health effects of various levels of nuclear attacks on the United States and the Soviet Union. Also identifies the large areas of uncertainty regarding what those effects would be.

The Effects of Nuclear War. OTA-NS-89, May 1979; vii, 151 pages. GPO stock #052-003-00668-5; $6.50. NTIS order #PB 296 946; $15.00. Also available in hardback for $10.95 from Allanheld, Osmun & Co., 81 Adams Dr., Totowa, N.J. 07512. Also available in paperback for $7.95 from Cheshire Books (Kampmann & Co., dist., 9 E. 40th St., New York, N.Y. 10016) under the title "The Day After Midnight: The Effects of Nuclear War.

Summary, The Effects of Nuclear War. OTA-ISC-114, April 1980; 27 pages. Available free from OTA Publishing Office.

Limited Nuclear Warfare

Critiques the assumptions made by the Department of Defense concerning the civilian casualties that would result in the United States in the event of a nuclear warfare exchange limited to military targets.

Analysis of Effects of Limited Nuclear Warfare. OTA-3, September 1975; v, 156 pages. Out-of-print. A copy may be inspected at the OTA Information Center, 600 Pennsylvania Avenue, S.E., Washington, D.C.

Health & Life Sciences

HEALTH

Medical Technology and Costs of the Medicare Program

Provides scientific background of Medicare reimbursement for alcoholism treatment services and describes the problems posed by the abuse of alcohol.

Health Technology Case Study 22: The Effectiveness and Costs of the Medicare Program. OTA-HCS-22, March 1983; x, 98 pages. GPO stock #052-003-00902-1; $5.00.

Proposals To Increase Competition in Health Care

Focuses on proposals for increased cost sharing by patients and greater competition among plans.

Medical Technology Under Proposals To Increase Competition in Health Care. OTA-H-190, October 1982; xi, 156 pages. GPO stock #052-003-00892-1; $6.50. NTIS order #PB 83-164 046; $16.00.

Summary, Medical Technology Under Proposals To Increase Competition in Health Care. OTA-H-191, October 1982, 28 pages. Available free from OTA Publishing Office.

Strategies for Medical Technology Assessment

Focuses on the flow of information that is central to an effective assessment system. Critiques the current assessment system with respect to identifying medical technologies for assessment; developing and synthesizing information about such technologies' health, economic, and social effects; and disseminating this information to health care decisionmakers.

Strategies for Medical Technology Assessment. OTA-H-181, September 1982; vii, 227 pages. GPO stock #052-003-00887-4; $7.50. NTIS order #PB 83-113 274; $20.50.

Summary, Strategies for Medical Technology Assessment. OTA-H-182, September 1982; 27 pages. Available free from OTA Publishing Office.

Postmarketing Surveillance of Prescription Drugs. OTA-H-189, November 1982; ix, 80 pages. GPO stock #052-003-00893-9; $5.00.

MEDLARS and Health Information Policy—A Technical Memorandum. OTA-TM-H-11, September 1982; ix, 150 pages. GPO stock #052-003-00891-2; $6.50.

Technology and Handicapped People

Examines the specific factors that affect the research and development, evaluation, diffusion and marketing, delivery, use, and financing of technologies directly related to disabled people.

Technology and Handicapped People. OTA-H-179, May 1982; vii, 214 pages. GPO stock #052-003-00874-2; $7.00.

Summary, Technology and Handicapped People. OTA-H-180, May 1982; 27 pages. Available free from OTA Publishing Office.

Background Paper #1: Mandatory Passive Restraint Systems in Automobiles: Issues and Evidence. OTA-BP-H-15, September 1982; vii, 50 pages. GPO stock #052-003-00890-4; $4.75.

Background Paper #2: Selected Telecommunications Devices for Hearing-Impaired Persons. OTA-BP-H-16, December 1982; vii, 28 pages. GPO stock #052-003-00898-0; $3.50.

Technology Transfer at the National Institutes of Health

Presents general information on biomedical R&D and its relationship to technology transfer, and on the processes of transferring medical technology and of assessing that technology. Discusses the current technology transfer activities of NIH and contains detailed looks at two specific institutes.

Technology Transfer at the National Institutes of Health—A Technical Memorandum. OTA-TM-H-10, March 1982; vii, 188 pages. GPO stock #052-003-00869-6; $6.50. NTIS order #PB 82-202 904; $16.50.

Cost Effectiveness of Influenza Vaccine

Examines the cost effectiveness of influenza vaccine using data on health effects and medical care costs produced by influenza vaccine from 1972 to 1978. Suggests ways to increase the use of the vaccine.

Cost-Effectiveness Analysis of Inactivated Influenza Vaccine. OTA-H-152, December 1981; viii, 67 pages. GPO stock #052-003-00855-6; $5.50. NTIS order #PB 82-178 492; $9.00.

Cancer Risks From the Environment

Examines four major issues: estimates of the percentage of cancer due to environmental exposure, technologies used to test for carcinogenicity, methods used for extrapolating data from animals to humans, and regulatory path ways for controlling carcinogens.

Assessment of Technologies for Determining Cancer Risks From the Environment. OTA-H-138, June 1981; vii, 242 pages. GPO stock #052-003-00832-7; $7.50. NTIS order #PB 81-235 400; $19.50. Also available in hardback for $18.00 under the title: "Cancer Risks: Assessing and Reducing the Dangers in Our Society" from Westview Press, Sales Department, 5500 Central Ave., Boulder, CO 80301.

Summary, Assessment of Technologies for Determining Cancer Risks From the Environment. OTA-H-137, June 1981; 28 pages. Available free from OTA Publishing Office.

Cost Effectiveness of Medical Technology

Analyzes the feasibility, implications, and usefulness of cost-effectiveness analysis (CEA) and cost-benefit analysis (CBA) in health care decisionmaking, including the current and potential use of CEA/CBA or related techniques in six health care activities: reimbursement programs, Professional Standards Review Organizations, health planning, market approval for drugs and medical devices, R&D programs, and health maintenance organizations.

The Implications of Cost-Effectiveness Analysis of Medical Technology. OTA-H-126, August 1980; vii, 219 pages. GPO stock #052-003-00765-7; $7.50. NTIS order #PB 80-216 864; $18.00.

Summary, The Implications of Cost-Effectiveness Analysis of Medical Technology. OTA-H-125, August 1980; 27 pages. Available free from OTA Publishing Office.

Background Paper #1: Methodological Issues and Literature Review. OTA-BP-H-5, September 1980; vi, 138 pages. GPO stock #052-003-00780-1; $6.00. NTIS order #PB 81-144 602; $13.50.

Background Paper #2: Case Studies of Medical Technologies.—17 case studies:

Case Study #1: Formal Analysis, Policy Formulation, and End-Stage Renal Disease. OTA-BP-H-9(1), April 1981; viii, 25 pages. GPO stock #052-003-00809-2; $2.75. NTIS order #PB 81-209 769; $7.50.

Case Study #2: The Feasibility of Economic Evaluation of Diagnostic Procedures: The Case of CT Scanning. OTA-BP-H-9(2), April 1981; viii, 24 pages. GPO stock #052-003-00810-6; $2.75. NTIS order #PB 81-209 777; $7.50.

Case Study #3: Screening for Colon Cancer: A Technology Assessment. OTA-BP-H-9(3), April 1981; viii, 19 pages. GPO stock #052-003-00811-4; $2.75. NTIS order #PB 81-209 785; $7.50.

Case Study #4: Cost Effectiveness of Automated Multichannel Chemistry Analyzers. OTA-BP-H-9(4), April 1981; viii, 25 pages. GPO stock #052-003-00813-1; $3.25. NTIS order #PB 81-209 793; $7.50.

Case Study #5: Periodontal Disease: Assessing the Effectiveness and Costs of the Keyes Technique. OTA-BP-H-9(5), May 1981; viii, 32 pages. GPO stock #052-003-00817-3; $3.25. NTIS order #PB 81-221 780; $7.50.

Case Study #6: The Cost Effectiveness of Bone Marrow Transplant Therapy and Its Policy Implications. OTA-BP-H-9(6), May 1981; viii, 15 pages. NTIS order #PB 81-221 798; $7.50.

Case Study #7: Allocating Costs and Benefits in Disease Prevention Programs: An Application to Cervical Cancer Screening. OTA-BP-H-9(7), May 1981; viii, 32 pages. GPO stock #052-003-00818-1; $3.25. NTIS order #PB 81-221 806; $7.50.

Case Study #8: The Cost Effectiveness of Upper Gastrointestinal Endoscopy. OTA-BP-H-9(8), May 1981; viii, 21 pages. GPO stock #052-003-00815-7; $2.75. NTIS order #PB 81-221 814; $7.50.

Case Study #9: The Artificial Heart: Cost, Risks, and Benefits. OTA-BP-H-9(9), May 1982; viii, 94 pages. GPO stock #052-003-00876-9; $5.50. NTIS order #PB 82-239 971; $12.00.

Case Study #10: The Costs and Effectiveness of Neonatal Intensive Care. OTA-BP-H-9(10), August 1981; viii, 51 pages. GPO stock #052-003-00845-9; $4.25. NTIS order #PB 82-101 411; $9.00.

Case Study #11: Benefit and Cost Analysis of Medical Interventions: The Case of Cimetidine and Peptic Ulcer Disease. OTA-BP-H-9(11), September 1981; viii, 72 pages. GPO stock #052-003-00854-8; $4.75. NTIS order #PB 82-118 910; $9.00.

Case Study #12: Assessing Selected Respiratory Therapy Modalities: Trends and Relative Costs in the Washington, D.C. Area. OTA- BP-H-9(12), July 1981; viii, 23 pages. GPO stock #052-003-00843-2; $2.75. NTIS order #PB 82-101 122; $7.50.

Case Study #13: Cardiac Radionuclide Imaging and Cost Effectiveness. OTA-BP-H-9(13), May 1982; viii, 59 pages. GPO stock #052-003-00877-7; $5.00. NTIS order #PB 82-239 989; $9.00.

Case Study #14: Cost Benefit/Cost Effectiveness of Medical Technologies: A Case Study of Orthopedic Joint Implants. OTA-BP-H-9(14), September 1981; viii, 28 pages. GPO stock #052-003-00850-5; $3.50. NTIS order #PB 82-120 833; $7.50.

Case Study #15: Elective Hysterectomy: Costs, Risks, and Benefits. OTA-BP-H-9(15), October 1981; viii, 40 pages. GPO stock #052-003-00856-4; $2.75. NTIS order #PB 82-122 326; $8.50.

Case Study #16: The Costs and Effectiveness of Nurse Practitioners. OTA-BP-H-9(16), July 1981; viii, 37 pages. GPO stock #052-003-00844-1; $3.50. NTIS order #PB 82-101 064; $7.50.

Case Study #17: Surgery for Breast Cancer. OTA-BP-H-9(17). October 1981; viii, 29 pages. GPO stock #052-003-00857-2; $4.50. NTIS order #PB 82-124 181; $7.50.

Background Paper #3: The Efficacy and Cost Effectiveness of Psychotherapy. OTA-BP-H-6, October 1980; vii, 93 pages. NTIS order #PB 81-144 610; $12.00.

Background Paper #4: The Management of Health Care Technology in Ten Countries. OTA-BP-H-7, October 1980; vii, 222 pages. GPO stock #052-003-00784-3; $7.50. NTIS order #PB 81-144 628; $19.50.

Background Paper #5: Assessment of Four Common X-Ray Procedures. OTA-BP-H-14, April 1982; vii, 63 pages. GPO stock #052-003-00872-6; $4.50. NTIS order #PB 83-165 506; $10.00.

Physician Supply and Requirements

Analyzes the assumptions, methods, and conclusions of the technologies for forecasting both the need for and supply of physicians by specialty and geographical distribution.

Forecasts of Physician Supply and Requirements. OTA-H-113, April 1980; x, 86 pages. GPO stock #052-003-00746-1; $5.50. NTIS order #PB 80-181 670; $10.50.

Computers in Medical Education and Assessment

Describes current uses of computers in medicine and summarizes the impact of computer technology on medical education, practice, and evaluation.

Computer Technology in Medical Education and Assessment: A Background Paper. OTA-BR-H-1, September 1979; xii, 139 pages. GPO stock #052-003-00704-5; $6.50. NTIS order #PB 80-102 528; $13.50.

Federal Vaccine and Immunization Policies

Analyzes Federal policies related to four areas of vaccine and immunization activities: financing vaccine research and development, evaluating vaccine safety and efficacy, reimbursing for vaccine use, and compensating for vaccine-related injuries. Uses case studies involving pneumococcal vaccine.

A Review of Selected Federal Vaccine and Immunization Policies Based on Case Studies of Pneumococcal Vaccine. OTA-H-96, September 1979; xvi, 208 pages. GPO stock #052-003-00701-1; $7.50. NTIS order #PB 80-116 106; $18.00.

Compensation for Vaccine-Related Injuries—A Technical Memorandum. OTA-TM-H-6, November 1980; ix, 105 pages. GPO #052-003-00788-6; $5.50. NTIS order #PB 81-163 909; $12.00.

Federal Health Statistics

Examines data systems used in Federal health programs and offers alternatives for their effective management. Also lists laws that authorize the then Department of Health, Education, and Welfare to collect and maintain health data.

Selected Topics in Federal Health Statistics. OTA-H-90, June 1979; xii, 212 pages. GPO stock #052-003-00683-9; $7.50. NTIS order #PB 298 449; $18.00.

Efficacy and Safety of Medical Technologies

Evaluates the need for assessments of the efficacy and safety of medical technologies before they go into widespread use. Also reports on 17 brief case studies, including mammography, amniocentesis, electronic fetal monitoring, and treatment for Hodgkin's disease, as illustrative of the technologies and issues involved.

Assessing the Efficacy and Safety of Medical Technologies. OTA-H-75, September 1978; xiii, 133 pages. GPO stock #052-003-00593-0; $6.00. NTIS order #PB 286 929; $13.50.

CT Scanners

Analyzes issues such as efficacy, health planning, use, and financing arising from the widespread adoption of the computed tomography (CT) scanner, an expensive diagnostic device that combines X-ray equipment with a computer and television-like tube to produce cross-sectional images of the body.

Policy Implications of the Computed Tomography (CT) Scanner. OTA-H-72, August 1978; ix, 195 pages. GPO stock #052-003-00565-4; $7.00. NTIS order #PB 284 872; $16.50.

Policy Implications of Computed Tomography (CT) Scanner: An Update—Background Paper. OTA-BP-H-8, January 1981; viii, 112 pages. NTIS order #PB 81-163 917; $12.00.

Policy Implications of Medical Information Systems

Examines the potential of computer-based medical information systems, which process both administrative and medical data, to affect the quality, cost, and efficiency of medical care. Examines the benefits and limitations of such systems, factors influencing their adoption, and possible Federal policy alternatives regarding their development and use.

Policy Implications of Medical Information Systems. OTA-H-56, November 1977; x, 79 pages. GPO stock #052-003-00496-8; $5.50. NTIS order #PB 274 857; $9.00.

Cancer Testing Technology and Saccharin

Assesses the capacity of current testing methodology to predict the carcinogenic potential of chemicals consumed by humans. Specifically evaluates the potential of saccharin to cause cancer in humans. Also evaluates the potential health benefits of saccharin and the availability of alternative artificial sweeteners.

Cancer Testing Technology and Saccharin. OTA-H-55, October 1977; xii, 149 pages. GPO stock #052-003-00471-2; $6.50. NTIS order #PB 273 499; $13.50.

Development of Medical Technology

Examines the need for assessing the potential social impacts of emerging medical technologies while they are being developed. In addition, formulates an initial list of questions that might be used to elicit information about the effects of such new technologies. Also presents nine brief case histories illustrating the complexities of medical technologies, their development, and the variety of questions resulting from their existence.

Development of Medical Technology: Opportunities for Assessment. OTA-H-34, August 1976; x, 104 pages. GPO stock #052-003-00217-5; $5.50. NTIS order #PB 258 117; $12.00.

Drug Bioequivalence

Examines the relationships between the chemical and therapeutic equivalence of drug products. Also assesses the capability of current technology to determine whether drug products with the same physical and chemical composition produce comparable therapeutic effect. Reviews regulations and practices now used to ensure quality and uniformity of drug products.

Drug Bioequivalence. OTA-H-3, July 1974; vi, 78 pages. NTIS order #PB 244 862; $10.50.

18-105 O - 83 - 4 : QL 3

FOOD & RENEWABLE RESOURCES

U.S. Cropland and Rangeland Productivity

Assesses the effects of presently used technologies on the capacity of cropland and rangeland resource base to sustain high levels of production. Evaluates emerging technologies that might be used to affect adverse effects of some of the established technologies.

Impacts of Technology on U.S. Cropland and Rangeland Productivity. OTA-F-166, August 1982; vii, 266 pages. GPO stock #052-003-00884-0; $7.50. NTIS order #PB 83-125 013; $22.00.

Summary, Impacts of Technology on U.S. Cropland and Rangeland Productivity. OTA-F-167, August 1982; 28 pages. Available free from OTA Publishing Office.

U.S. Food and Agricultural Research

Analyzes the scientific base for establishing national, regional, and local research problems and the role of Federal, State, and private institutions in solving these problems. Evaluates methods in identifying priority research areas, the adequacy of present basic and applied research efforts, and public policy options.

U.S. Food and Agricultural Research. OTA-F-155, December 1981; viii, 212 pages. GPO stock #052-003-00860-2; $7.00. NTIS order #PB 82-170 572; $18.00.

Summary, U.S. Food and Agricultural Research. OTA-F-156, December 1981; 32 pages. Available free from OTA Publishing Office.

Environmental Contaminants in Food

Discusses the different types and sources of chemical and radioactive contaminants in food, considers the economic costs and health dangers they pose, and evaluates present Federal and State programs for regulating and monitoring these substances.

Environmental Contaminants in Food. OTA-F-103, December 1979; x, 229 pages. GPO stock #052-003-00724-0; $7.00. NTIS order #PB 80-153 265; $19.50.

Summary, Environmental Contaminants in Food. OTA-F-102, December 1979; 19 pages. Available free from OTA Publishing Office.

Volume II, Working Papers: Environmental Contaminants in Food—Parts A and B. Available from NTIS:

Volume II—Part A. Contents: Priority Setting of Toxic Substances for Guiding Monitoring Programs; Five Case Studies of Environmental Food Contamination. 634 pages. NTIS order #PB 80-153 273. Contact NTIS for price.

Volume II—Part B. Contents: Toxic Substances in Food Information Systems; Assessment of Carcinogenic Risks From PCBs in Food; Economic Analysis of Alternative Action Levels in the Regulation of Environmental Contaminants in Food; Analysis of Foods for Radioactivity; Approaches to Monitoring Environmental Contaminants in Food;

International Activities; Analytical Systems for the Determination of Metals in Food and Water Supplies; Assessment of Methods for Regulating "Unavoidable" Contaminants in Food; Consumer Risk From Environmental Contaminants in Foods. 566 pages. NTIS order #PB 81-116 774; $39.00.

Pest Management Strategies

Reviews the array of tactics currently used to control agricultural pests, and examines the potential benefits of integrated pest management.

Pest Management Strategies in Crop Protection. OTA-F-98, October 1979; xiv, 132 pages. GPO stock #052-003-00708-8; $6.00. NTIS order #PB 80-120 017; $13.50.

Volume II, Working Papers: Pest Management Strategies. OTA-F-99, October 1979; xi, 754 pages. GPO stock #052-003-00709-6; $15.00. NTIS order #PB 80-120 025. Contact NTIS for price.

Open Shelf-Life Dating of Food

Addresses the practicality, benefits, and costs of open shelf-life dating of food products to inform consumers of freshness, and identifies Federal policy options on food dating.

Open Shelf-Life Dating of Food. OTA-F-94, August 1979; viii, 108 pages. GPO stock #052-003-00694-4; $5.50. NTIS order #PB 80-101 629; $12.00.

Drugs in Livestock Feed

Analyzes the use of antibacterial and other drugs to promote growth and prevent disease in livestock, and the implications for human health of the low levels at which these drugs are administered.

Drugs in Livestock Feed: Technical Report. OTA-F-91, June 1979; x, 67 pages. GPO stock #052-003-00685-5, $5.00. NTIS order #PB 298 450; $9.00.

Food Marketing Technologies

Examines new and emerging technologies for marketing food for their current state of development, probability of being adopted, the extent to which they are or will be used, their expected impacts, and the policy issues they raise. Also identifies those technologies that require further study.

Emerging Food Marketing Technologies: A Preliminary Analysis. OTA-F-79, October 1978; viii, 88 pages. NTIS order #PB 291 039; $10.50.

Nutrition Research

Evaluates alternative strategies to redirect Federal research toward examining the relationship between nutrition and the changing health problems of Americans. Administrative means for implementing the strategies are also considered.

Nutrition Research Alternatives. OTA-F-74, September 1978; xii, 77 pages. NTIS order #PB 289 825; $10.50.

Food Research and Development

Evaluates alternative methods for organizing and funding basic research in the biological sciences that is designed to increase food production, and identifies three specific areas that possess opportunity for fundamental scientific discoveries.

Organizing and Financing Basic Research To Increase Food Production. OTA-F-49, June 1977; vii, 38 pages. GPO stock #052-003-00398-8; $4.75. NTIS order #PB 273 182; $7.50.

Retail Food Grading

Assesses the capability of the current food grading system used by the Federal Government, as well as that of alternative systems that could be adopted, to give consumers adequate information concerning the nutritional value of food products sold on grocers' shelves.

Perspectives on Federal Retail Food Grading. OTA-F-47, June 1977; viii, 87 pages. NTIS order #PB 273 163; $10.50.

Food Information Systems—Summary and Analysis

Summarizes and integrates information generated on information systems designed to collect data on world food supply and demand.

Food Information Systems—Summary and Analysis. OTA-F-35, August 1976; xvi, 86 pages. NTIS order #PB 258 172; $12.00.

Food Information Systems—OTA Board Hearings

Contains the record of 4 days of public hearings held by the OTA Board in 1975 and 1976 in support of OTA's assessment on how food and agricultural information is gathered and used around the world.

Food Information Systems. OTA-F-29, September 1975; iii, 414 pages. NTIS order #PB 258 171; $30.00.

BIOLOGICAL APPLICATIONS

Genetic Testing

Examines questions on the technological state of the art; claimed associations between certain recessive genes or chromosomal abnormalities and increased risk of harm from certain chemicals; the alternatives; responsibilities companies have toward high-risk workers; how testing is to be done in order to protect the interests of all parties.

The Role of Genetic Testing in the Prevention of Occupational Disease. In press, OTA-BA-194. Contact OTA Publishing Office for further information.

Summary, The Role of Genetic Testing in the Prevention of Occupational Disease. In press, OTA-BA-195. Available free from OTA Publishing Office.

World Population and Fertility Planning Technology

Addresses issues of how Government policies and programs view planned birth technologies, and how international population assistance has changed world population growth in the last 20 years. Assesses present and prospective birth technologies and factors determining their future development and use.

World Population and Fertility Planning: The Next 20 Years. OTA-HR-157, February 1982; xiii, 243 pages. GPO stock #052-003-00867-0; $7.50. NTIS order #PB 82-200 338; $21.00.

Summary, World Population and Fertility Planning Technology: The Next 20 Years. OTA-HR-158, February 1982; 27 pages. Available free from OTA Publishing Office.

Volume II: Working Papers—Parts A-E. June 1982; 545 pages. NTIS order #PB 82-253 428; $37.50.

Impacts of Applied Genetics

Examines the application of classical and molecular genetic technologies to micro-organisms, plants, and animals. Current developments are especially rapid in the application of genetic technologies to micro-organisms; these are studied in three industries: pharmaceutical, chemical, and food.

Impacts of Applied Genetics: Micro-Organisms, Plants, and Animals. OTA-HR-132, April 1981; xii, 331 pages. GPO stock #052-003-00805-0; $9.00. NTIS order #PB 81-206 609; $25.50. Also available in hardback for $25.00 under the title "Genetic Technologies: A New Frontier" from Westview Press, Sales Department, 5500 Central Ave., Boulder, CO 80301.

Summary, Impacts of Applied Genetics: Micro-Organisms, Plants, and Animals. OTA-HR-133, April 1981; 27 pages. Available free from OTA Publishing Office.

Volume II: Appendixes—Parts A & B. July 1981; 636 pages. NTIS order #PB 82-101 536. Contact NTIS for price.

Science, Information, & Natural Resources

COMMUNICATION AND INFORMATION TECHNOLOGIES

Computerized Factory Automation

Presents a set of concepts and background materials that are fundamental to the analysis of the labor, education, and training implications of programmable automation technology.

Automation and the Workplace: Selected Labor, Education, and Training Issues—A Technical Memorandum. OTA-TM-CIT-25, March 1983; vii, 105 pages. GPO stock #052-003-00900-5; $5.50.

Patents and the Commercialization of New Technology

Assesses the impact of the patent system on the generation and stimulation of new technologically based firms to the future economic vitality of the United States.

Patents and the Commercialization of New Technology. In press, OTA-CIT-202. Contact OTA Publishing Office for further information.

Summary, Patents and the Commercialization of New Technology. In press, OTA-CIT-203. Available free from OTA Publishing Office.

Technology and Education

Provides an overview of the issues relating to the educational applications of the new information technologies. It examines both the demands that the information revolution will make on education and the opportunities afforded by the new information technologies to meet those demands.

Informational Technology and Its Impact on American Education. OTA-CIT-187, November 1982; x, 280 pages. GPO stock #052-003-00888-2; $8.00.

Summary, Informational Technology and its Impact on American Education. OTA-188, September 1982; 24 pages. Available free from OTA Publishing Office.

Social Impacts of Robotics

Presents background information and identifies key questions and issues that were raised to the OTA staff during the course of the workshop.

Exploratory Workshop on the Social Impacts of Robotics—A Background Paper. OTA-BP-CIT-11, February 1982; vii, 136 pages. GPO stock #052-003-00865-3; $6.00. NTIS order #PB 82-184 862; $13.50.

Radiofrequency Use and Management Impacts

Consists of the record of an 11 week conference held in Geneva, Switzerland, by major world representatives to review and adjust the global allocation of uses of the radio magnetic spectrum. Identifies the conferences' major results and projected impacts and the role of U.S. participation in this and future conferences.

Radiofrequency Use and Management Impacts From the World Administrative Radio Conference of 1979. OTA-CIT-163, January 1982; vii, 163 pages. GPO stock #052-003-00863-7; $6.50. NTIS order #PB 82-177 536; $15.00.

Summary, Radiofrequency Use and Management Impacts From the World Administrative Radio Conference of 1979. OTA-CIT-164, January 1982. Available free from OTA Publishing Office.

Societal Impacts of the National Information Systems

Includes an overview study—Computer-Based National Information Systems—and three information system case studies—National Crime Information Center of the FBI; electronic mail and message systems; and electronic funds transfer.

Computer-Based National Information Systems: Technology and Public Policy Issues. OTA-CIT-146, September 1981; x, 166 pages. GPO stock #052-003-00852-1; $6.50. NTIS order #PB 82-126 681; $15.00.

Summary, Computer-Based National Information Systems: Technology and Public Policy Issues. OTA-CIT-147, October 1981; 26 pages. Available free from OTA Publishing Office.

Assessment of the National Crime Information Center and Computerized Criminal History System. OTA-CIT-161, October 1982; xi, 208 pages. GPO stock #052-003-00896-3; $7.00.

Summary, Assessment of the National Crime Information Center and Computerized Criminal History System. OTA-CIT-162, October 1982; 32 pages. Available free from OTA Publishing Office.

A Preliminary Assessment of the National Crime Information Center and the Computerized Criminal History System. OTA-I-80, December 1978; vii, 84 pages. NTIS order #PB 291 845; $10.50.

Implications of Electronic Mail and Message Systems for the U.S. Postal Service. OTA-CIT-183, August 1982; xi, 113 pages. GPO stock #052-003-00885-8; $5.50.

Summary, Implications of Electronic Mail and Message Systems for the U.S. Postal Service. OTA-CIT-184, August 1982; 24 pages. Available free from OTA Publishing Office.

Selected Electronic Funds Transfer Issues: Privacy, Security, and Equity—Background Paper. OTA-BP-CIT-12, March 1982; viii, 77 pages. GPO stock #052-003-00868-8; $4.75. NTIS order #PB 82-202 532; $9.00.

Selected Electronic Funds Transfer Issues: Privacy, Security, and Equity—Volume II: Working Papers—Parts A-G. May 1982; 613 pages. NTIS order #PB 82-238 312; $40.50.

Patent-Term Extension

Examines the benefits and efficacy of pharmaceutical innovative research and development. Identifies the effects of patent-term extension on the members of government, industry, and society.

Patent-Term Extension and the Pharmaceutical Industry. OTA-CIT-143, August 1981; viii, 74 pages. GPO stock #052-003-00842-4; $5.00. NTIS order #PB 82-100 918; $8.00.

The IRS Tax Administration System

Raises questions about the civil liberties, privacy, and due process of millions of Americans that could arise from a new computer system—which once installed will be the largest and most sophisticated computer operated by the Federal Government—proposed by the Internal Revenue Service to replace its older and less efficient system.

A Preliminary Analysis of the IRS Tax Administration System. OTA-TCI-43, March 1977; x, 206 pages. NTIS order #PB 273 143; $16.50.

Broadband Communications in Rural America

Examines the issues involved in using communication technology—such as cable television, ground- or satellite-based microwave links, and automatic broadcast repeater stations—to provide community services in rural areas.

The Feasibility and Value of Broadband Communications in Rural Areas: A Preliminary Evaluation. OTA-T-33, April 1976; xv, 309 pages. NTIS order #PB 258 095; $25.50.

OCEANS AND ENVIRONMENT

Impacts of Atmospheric Alterations

Characterizes the potential benefits of acting now to abate long-range transport air pollution and the potential costs of action that may be premature.

The Regional Implications of Transported Air Pollutants. In press, OTA-O-204. Contact OTA Publishing Office for further information.

Summary, The Regional Implications of Transported Air Pollutants. In press, OTA-O-205. Available free from OTA Publishing Office.

Radioactive Waste

Presents the findings and conclusions of OTA's analysis of Federal policy for the management and disposal of commercial high-level radioactive waste.

Managing Commercial High-Level Radioactive Waste. In press, OTA-O-171. Contact OTA Publishing Office for further information.

Summary, Managing Commercial High-Level Radioactive Waste. OTA-O-172, April 1982; 64 pages. Available free from OTA Publishing Office.

Freshwater Resources Management

Considers a wide range of models and predictive methods of the credibility of the techniques used to predict the work of water resource projects and regulations, and the societal and environmental effects of these decisions.

Use of Models for Water Resources Management, Planning, and Policy. OTA-O-159, August 1982; vii, 242 pages. GPO stock #052-003-00880-7; $7.50. NTIS order #PB 83-103 655; $20.50.

Summary, Use of Models for Water Resources Management, Planning, and Policy. OTA-O-160, August 1982; 27 pages. Available free from OTA Publishing Office.

Ocean Research Technology

Identifies the technologies and management systems that are most effective in researching four areas: weather and climate, marine pollution, undersea mineral exploration, and fisheries.

Technology and Oceanography: An Assessment of Federal Technologies for Oceanographic Research and Monitoring. OTA-O-141, June 1981; vii, 161 pages. GPO stock #052-003-00833-5; $6.50. NTIS order #PB 82-101 718; $15.00.

Summary, Technology and Oceanography: An Assessment of Federal Technologies for Oceanographic Research and Monitoring. OTA-O-142, June 1981; 27 pages. Available free from OTA Publishing Office.

Volume II, Working Papers: Technology and Oceanography: Fishery Research Technology. June 1981; 248 pages. NTIS order #PB 82-101 726; $19.50.

Coal Exports and Port Development

Addresses four major issues that are important to Federal policy debate: estimating the potential U.S. coal export market, development of foreign trade policy, the Federal role in dredging harbors, and the outlook for alternative technologies.

Coal Exports and Port Development—A Technical Memorandum. OTA-TM-O-8, April 1981; vii, 84 pages. GPO stock #052-003-00807-6; $4.75. NTIS order #PB 81-203 358; $10.50.

Ocean Margin Drilling

Evaluates the newly proposed public-private cooperative research effort in marine geology, its scientific merits, problems of technology development, aspects of private participation, Government management, and possible alternatives to the program.

Ocean Margin Drilling—A Technical Memorandum. OTA-TM-O-4, May 1980; 115 pages. GPO stock #052-003-00754-1; $5.50. NTIS order #PB 80-198 302; $12.00.

Ocean Thermal Energy—Recent Developments

Reviews status of ocean thermal energy conversion (OTEC) developments occurring after OTA's 1978 report on OTEC, including technical accomplishments and remaining technical uncertainties.

Recent Developments in Ocean Thermal Energy—A Technical Memorandum. OTA-TM-O-3, April 1980; 32 pages. GPO stock #052-003-00750-9; $4.50. NTIS order #PB 80-201 825; $7.50.

Renewable Ocean Energy Sources

Examines the renewable ocean energy sources that are being considered as possible contributors to our future energy supply, and evaluates the technical problems and policy decisions that will affect further development of these sources.

Part I: Ocean Thermal Energy Conversion. OTA-O-62, May 1978; viii, 44 pages. GPO stock #052-003-00536-1; $4.50. NTIS order #PB 283 104; $7.50.

Working Papers, Part I: Ocean Thermal Energy Conversion. OTA-O-63, May 1978; xi, 113 pages. NTIS order #PB 283 103; $13.50.

Working Papers, Part II: Ocean Winds, Currents, Waves, Tides, and Salinity Gradients. March 1979; ii, 150 pages. NTIS order #PB 295 876; $15.00.

Liquefied Natural Gas

Evaluates the status and trends of ongoing and proposed projects involving the transportation and handling of liquefied natural gas, analyzes the technology involved, and discusses nine economic, technological, regulatory, political, and social areas of concern.

Transportation of Liquefied Natural Gas. OTA-O-53, September 1977; xii, 101 pages. GPO stock #052-003-00436-4; $5.50. NTIS order #PB 273 486; $12.00.

200-Mile Fisheries Zone

Evaluates the problems and opportunities presented by the new 200-mile U.S. fishery zone, as well as alternative methods for implementing, managing, and enforcing regulations for the zone.

Establishing a 200-Mile Fisheries Zone. OTA-O-45, June 1977; x, 134 pages. NTIS order #PB 273 578; $13.50.

Working Papers: Establishing a 200-Mile Fisheries Zone—Consists of five working papers containing data and analysis used as background material for OTA's assessment on implementing the 200-mile fisheries zone. OTA-O-46, June 1977; v, 375 pages. NTIS order #PB 273 579; $28.50.

Coastal Effects of Offshore Energy Systems

Assesses social, economic, and environmental impacts of three proposed offshore energy systems—development of oil and gas resources, deepwater ports for oil tankers, and floating nuclear powerplants—on the coastal areas of New Jersey and Delaware, with implications for other coastal areas in the United States and elsewhere in the world.

Coastal Effects of Offshore Energy Systems. OTA-O-37, November 1976; xvi, 288 pages. GPO stock #052-003-00245-1; $8.50. NTIS order #PB 274 033; $22.50.

Working Papers: Coastal Effects of Offshore Energy Systems—Contains 10 working papers prepared by various experts in appropriate fields that were used in OTA's assessment of the coastal effects of offshore energy systems. OTA-O-38, November 1976; vii, 932 pages. GPO stock #052-003-00246-9; $20.00. NTIS order #PB 274 034; $28.50.

Brochure: Coastal Effects of Offshore Energy Systems—Summarizes certain findings and public policy alternatives of OTA's assessment of the coastal effects of offshore energy systems. OTA-O-39, December 1976; 15 pages. Available free from OTA Publishing Office.

Oil Transportation by Tankers

Examines safety problems of oil tankers and their potential effect on the ecology and quality of the oceans and coastal areas.

Oil Transportation by Tankers: An Analysis of Marine Pollution and Safety Measures. OTA-O-9, July 1975; xvii, 288 pages. NTIS order #PB 244 457; $24.00.

Separating Exploration From Production of Oil and Gas on the Outer Continental Shelf

Analyzes the potential for and the alternative methods by which exploration for and production of oil and gas resources on the outer continental shelf could be separated into two distinct operations.

An Analysis of the Feasibility of Separating Exploration From Production of Oil and Gas on the Outer Continental Shelf. OTA-O-7, May 1975; xi, 290 pages. NTIS order #PB 248 381; microfiche only, $4.00.

Accelerating Oil and Gas Development on the Outer Continental Shelf

Examines the potential effects of the accelerated leasing policy for oil and gas resources on the Outer Continental Shelf proposed by the U.S. Department of the Interior in 1974.

Analysis of the Department of the Interior's Proposed Acceleration of Development of Oil and Gas on the Outer Continental Shelf. #1, March 1975; xi, 290 pages. NTIS order #PB 252 202; $7.50.

SPACE, TRANSPORTATION, AND INNOVATION

International Cooperation and Competition in Civilian Space Activities

Presents a post-conference review of the U.N. Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE '82).

UNISPACE '82: A Context for International Cooperation and Competition—A Technical Memorandum. In press, OTA-TM-STI-26. Contact OTA Publishing Office for further information.

Space Science Research

Summarizes and critiques the views of many people interested in space science, several of whom attended an OTA workshop on May 5, 1982.

Space Science Research in the United States—A Technical Memorandum. OTA-TM-STI-19, September 1982; vii, 50 pages. GPO stock #052-003-00895-5; $4.75. NTIS order #PB 83-166 512; $10.00.

Review of FAA NAS Plan

Critiques the FAA National Airspace System Plan, with emphasis on changes from previous proposals; delineates technological options and alternative strategies of implementation within the general framework of the FAA plan; and analyzes issues of benefits and costs to the Government and airspace users.

Review of the FAA 1982 National Airspace System Plan. OTA-STI-176, August 1982; x, 69 pages. GPO stock #052-003-00881-5; $5.00. NTIS order #PB 83-102 772; $10.00.

Civilian Space Policy and Applications

Explores the question of Federal involvement in space research and development (R&D), the issues that arise in the transition from R&D to full-fledged operational status, when and under what circumstances commercial involvement is appropriate, and how to respond to commercial competition form overseas.

Civilian Space Policy and Applications. OTA-STI-177, June 1982; ix, 391 pages. GPO stock #052-003-00878-5; $9.50. NTIS order #PB 82-234 444; $28.50.

Summary, Civilian Space Policy and Applications. OTA-STI-178, June 1982; 27 pages. Available free from OTA Publishing Office.

Global Models, World Futures, and Public Policy

Evaluates methodologies, findings, and implications of Global 2000 and other global modeling studies. Examines present use and potential usefulness of this technology as a powerful tool for long-range strategic analysis and policy development.

Global Models, World Futures, and Public Policy. OTA-R-165, April 1982; vii, 120 pages. GPO stock #052-003-00870-0; $5.50. NTIS order #PB 82-251 299; $13.50.

Airport and Air Traffic Control System

Provides a perspective on both airport development aid and the Federal Aviation Administration's proposed air traffic control system modernization.

Airport and Air Traffic Control System. OTA-STI-175, January 1982; viii, 141 pages. GPO stock #052-003-00873-4; $6.00. NTIS order #PB 82-207 606; $15.00.

Discrete Address Beacon System (DABS)

Summary of findings and proceedings of a 1-day seminar held by OTA in January 1980 to examine some impacts of the Federal Aviation Administration proposal to implement DABS and the Automatic Traffic Advisory and Resolution Service.

Proceedings of the OTA Seminar on the Discrete Address Beacon System (DABS). OTA-BP-T-4, July 1980; vii, 46 pages. NTIS order #PB 80-208 168; $9.00.

Impact of Advanced Air Transport Technology

Examines recent advances in the technology of high-speed aircraft and analyzes the economic, environmental, energy, societal, and safety impacts of their widespread introduction. The assessment has been published in four parts: passenger service, program financing and management, service to small communities, and air cargo operations.

Part 1: Advanced High-Speed Aircraft. Assesses the economics, feasibility, and uncertainties of developing advanced subsonic and/or supersonic passenger aircraft. OTA-T-112, April 1980; ix, 106 pages. GPO stock #052-003-00745-2; $5.50. NTIS order #PB 80-200 504; $10.50.

Summary, Part 1: Advanced High-Speed Aircraft. OTA-T-111, March 1980; 27 pages. Available free from OTA Publishing Office.

Part 2: Air Cargo—Background Paper. Analyzes air cargo operations, including the historical background and current status of the air freight industry, economics of air freight, the potential market, competitive concerns and the potential for technological change in future cargo aircrafts. OTA-BP-T-10, January 1982; viii, 54 pages. GPO stock #052-003-00853-0; $4.75. NTIS order #PB 82-186 818; $9.00

Part 3: Air Service to Small Communities. Assesses the economic impacts of low density service, the determinants of market size, conditions of competition, deregulation of the domestic commuter airline industry, and availability of air service to small communities. OTA-T-170, February 1982; viii, 46 pages. GPO stock #052-003-00864-5; $3.25. NTIS order #PB 82-186 800; $7.50.

Part 4: Financing and Program Alternatives for Advanced High-Speed Aircraft—Background Paper. Examines the potential financial and managerial barriers to carrying out—at some future date—a large-scale program to create a new high-speed, long-range commercial air transport

employing new technology. OTA-BP-T-14, August 1982; vii, 49 pages. GPO stock #052-003-00882-3; $4.75.

Advanced Group Rapid Transit

Examines second-generation automated guideway transit systems as part of a solution to the need for improved urban mass transit. Assesses the technical and economic impacts of system development, evaluates policy options in deployment, and identifies issues requiring further analysis.

Impact of Advanced Group Rapid Transit Technology. OTA-T-106, January 1980; viii, 58 pages. GPO stock #052-003-00736-3; $5.00. NTIS order #PB 80-153 323; $9.00.

Summary, Impact of Advanced Group Rapid Transit Technology. OTA-T-107, January 1980; 23 pages. Available free from OTA Publishing Office.

Railroad Safety: U.S. Canadian Comparison

Compares U.S. and Canadian rail systems and railroad safety programs, and identifies Canadian approaches that may be of interest in the United States.

Railroad Safety: U.S.-Canadian Comparison. OTA-T-95, August 1979; x, 109 pages. NTIS order #PB 301 397; $10.50.

The Automobile Transportation System

Describes energy, environmental, safety, and cost impacts of technological changes and assesses policy options pertaining to the future use and characteristics of the private car and its supporting systems through the year 2000.

Changes in the Future Use and Characteristics of the Automobile Transportation System: Volume 1—Summary and Findings. OTA-T-83, February 1979; viii, 39 pages. GPO stock #052-003-00649-9; $4.75. NTIS order #PB 293 645; $7.50.

Changes in the Future Use and Characteristics of the Automobile Transportation System: Volume II—Technical Report. OTA-T-84, February 1979; vii, 375 pages. GPO stock #052-003-00650-2; $9.50. NTIS order #PB 293 646; $28.50.

Changes in the Future Use and Characteristics of the Automobile Transportation System: Volume III—Public Participation. OTA-T-100, October 1979; vii, 72 pages. GPO stock #052-003-00710-0; $5.00. NTIS order #PB 81-115 545; $10.50.

Railroad Safety

Evaluates trends in railroad-related accidents, their effects on the railroad industry, and the effectiveness of Federal laws and policies in reducing fatalities and injuries as well as property losses.

An Evaluation of Railroad Safety. OTA-T-61, May 1978; xvi, 224 pages. GPO stock #052-003-00533-6; $7.50. NTIS order #PB 281 169; $18.00.

Working Papers: An Evaluation of Railroad Safety. OTA-T-64, May 1978; vii, 375 pages. NTIS order #PB 283 209; $13.50.

Automated Train Control

Evaluates the safety, maintenance, and cost of different levels of automation of mass transit trains.

Automatic Train Control in Rail Rapid Transit. OTA-T-30, May 1976; xiv, 238 pages. NTIS order #PB 254 738; $19.50.

Community Planning for Mass Transit

Assesses the ways cities plan for mass transit as well as the problems and possible solutions to mass transit needs in the context of changing relationships between the Federal Government and the transit industry. The report consists of separate summary, nine case studies, and technical and biographical volumes.

An Assessment of Community Planning for Mass Transit:

Volume 1: Summary. OTA-T-16, February 1976; ix, 73 pages. NTIS order #PB 253 679; $10.50.

Volume 2: Atlanta. OTA-T-17, March 1976; ix, 38 pages. NTIS order #PB 253 680; $7.50.

Volume 3: Boston. OTA-T-18, March 1976; ix, 34 pages. NTIS order #PB 253 681, $7.50.

Volume 4: Chicago. OTA-T-19, March 1976; ix, 45 pages. NTIS order #PB 253 682; $9.00.

Volume 5: Denver. OTA-T-20, March 1976; ix, 34 pages. NTIS order #PB 253 683; $7.50.

Volume 6: Los Angeles. OTA-T-21, March 1976; x, 49 pages. NTIS order #PB 253 684; $9.00.

Volume 7: Minneapolis-St. Paul. OTA-T-22, March 1976; ix, 25 pages. NTIS order #PB 253 685; $7.50.

Volume 8: San Francisco. OTA-T-23, March 1976; x, 46 pages. GPO stock #052-003-00148-9; $4.75. NTIS order #PB 253 686; $9.50.

Volume 9: Seattle. OTA-T-24, March 1976; ix, 36 pages. NTIS order #PB 253 687; $7.50.

Volume 10: Washington, D.C. OTA-T-25, March 1976; vii, 36 pages. GPO stock #052-003-00136-5; $4.50. NTIS order #PB 253 688; $7.50.

Volume 11: Technical Report. OTA-T-26; February 1976; v, 167 pages. NTIS order #PB 253 641; $16.00.

Volume 12: Bibliography. OTA-T-27, February 1976; iii, 123 pages. NTIS order #PB 253 642; $13.50.

Energy, the Economy, and Mass Transit

Examines the relationship of mass transit ridership to the energy shortages and economic recession experienced following the 1973 oil embargo.

Energy, the Economy, and Mass Transit. OTA-T-15, December 1975; xiii, 148 pages. NTIS order #PB 250 624; $15.00.

National Railroad Issues

Reviews a series of issues ranging from rate structure to public subsidies for the railroad industry in the United States.

A Review of National Railroad Issues. OTA-T-14, December 1975; xviii, 85 pages. NTIS order #PB 250 622; $12.00.

Rail Rehabilitation

Examines alternative approaches that the Federal Government might adopt to solve the financial and other problems of railroads located in the Northeast and Midwest, but whose difficulties are national in scope.

A Review of Alternative Approaches to Federal Funding of Rail Rehabilitation. OTA-T-11, September 1975; xvii, 69 pages. NTIS order #PB 250 632; $10.50.

Financial Viability of ConRail

Analyzes the ability of the Consolidated Rail Corporation (ConRail), the newly formed and Government-administered reorganization of several bankrupt railroad lines in the Northeastern United States, to pay its own way in light of proposed new rates.

The Financial Viability of ConRail. OTA-T-10, September 1975; xii, 81 pages. NTIS order #PB 250 630; $10.50.

Automated Guideway Transit

Examines the social and economic implications of introducing new mass transit technologies in U.S. cities, as well as the means by which three new personal transit technologies might be implemented.

Automated Guideway Transit: An Assessment of Personal Rapid Transit and Other New Systems. OTA-T-8, June 1975; xiii, 401 pages. NTIS order #PB 244 854; $28.50.

Automobile Collision Data

Analyzes the nationwide data base on automobile accidents in light of proposals by the National Highway Traffic Safety Administration to use crash recorders to relate crash forces to injuries.

Automobile Collision Data: An Assessment of Needs and Methods of Acquisition. OTA-T-5, February 1975; vi, 72 pages. NTIS order #PB 244 861; $21.00.

Technological Innovation and Health, Safety, and Environmental Regulations

Evaluates alternative regulatory policies with regard to the effectiveness and efficiency in ensuring that the rate and direction of technological change are compatible with health, safety, and environmental goals. Examines how regulatory policies influence private investments in innovation.

Technological Innovation and Health, Safety, and Environmental Regulations. In press, OTA-STI-173. Contact OTA Publishing Office for further information.

Summary, Technological Innovation and Health, Safety, and Environmental Regulations. In press, OTA-STI-174. Contact OTA Publishing Office for further information.

Technology for Local Development

Addresses the question of local development and the opportunities for—and appropriateness of—various technologies that can help local people to take advantage of local resources in meeting the needs of their own communities.

An Assessment of Technology for Local Development. OTA-R-129, January 1981; vii, 258 pages. GPO stock #052-003-00797-5; $7.50. NTIS order #PB 81-189 979; $21.00.

Summary, An Assessment of Technology for Local Development. OTA-R-130, January 1981; 27 pages. Available free from OTA Publishing Office.

The Scientific and Technical Enterprise

Suggests criteria for examining the state or health of the scientific and technical enterprise in the United States.

The Health of the Scientific and Technical Enterprise: An Advisory Panel Report. OTA-R-78, October 1978; x, 13 pages. NTIS order #PB 291 770; $6.00.

Government and Innovation

Examines the role of the Federal Government in influencing the introduction of new technologies, goods, and services into the marketplace.

Government Involvement in the Innovation Process—A Contractor's Report. OTA-R-73; August 1978, x, 69 pages. NTIS order #PB 286 545; $9.00.

Reorganization of Federal Science Education

Suggests criteria for evaluating the impacts of a new Department of Education on education programs in science and technology run by the National Science Foundation, as well as on other Federal science and technology activities.

Impact of a Department of Education on Federal Science and Technology Activities. OTA-R-71, August 1978; ix, 46 pages. NTIS order #PB 286 525; $9.00.

Role of Demonstrations in Federal R&D

Analyzes the role of demonstrations in Federal R&D policy and gives criteria for evaluating their success or lack thereof.

The Role of Demonstrations in Federal R&D Policy. OTA-R-70, July 1978; xvi, 59 pages. GPO stock #052-003-00557-3; $5.00. NTIS order #PB 284 387; $9.00.

R&D in the Civil Sector

Examines the management policies of the Federal Government for R&D aimed at the civil sector in light of the Federal Grant and Cooperative Agreement Act of 1977. Also poses issues to be considered in evaluating an Office of Management and Budget study of Federal assistance programs mandated by the act.

Applications of R&D in the Civil Sector. OTA-R-65, June 1978; xi, 42 pages. NTIS order #PB 283 035; $7.50.

Specialized Reports

Natural Hazards

Evaluates trends in disaster assistance and preparedness; examines the potential for a program of hazards management through prediction, reduction, and control; and identifies the policy issues and economic impacts of such a program.

U.S. Disaster Assistance to Developing Countries: Lessons Applicable to U.S. Domestic Disaster Programs—Background Paper. OTA-BP-X-1, January 1980; vi, 29 pages. NTIS order #PB 80-153 760; $7.50.

Criteria for Evaluating the Implementation Plan Required by the Earthquake Hazards Reduction Act of 1977—Background Paper. OTA-BP-X-2, January 1980; viii, 67 pages. NTIS order #PB 81-241 663; $10.50.

Issues and Options in Flood Hazards Management—Background Paper. OTA-BP-X-3, February 1980; xii, 96 pages. NTIS order #PB 80-151 087; $12.00.

Demographic Trends Influencing Education

Examines demographic trends such as birth and death rates, mobility patterns, women in the marketplace, and ethnic makeup of populations, and their likely effect on elementary and secondary schools in the near- and long-term future.

A Preliminary Analysis of Demographic Trends Influencing the Elementary and Secondary School Systems. Publishing in "General Issues in Elementary and Secondary Education: Hearings before the Subcommittee on Elementary, Secondary, and Vocational Education." Out of print, a copy may be inspected at the OTA Information Center, 600 Pennsylvania Avenue, S.E., Washington, D.C.

Technology Assessment in Business and Government

Summarizes and analyzes the evolution and influence of technology assessment as a tool for policymaking in Government, business and industry, and the academic research communities, as brought out in 4 days of hearings held June 1976 by the OTA Board.

Technology Assessment in Business and Government: Summary and Analysis. OTA-X-42, January 1977; xii, 32 pages. NTIS order #PB 273 164; $6.50.

Hearings: Technology Assessment Activities in the Industrial, Academic, and Governmental Communities—Compilation of the record of 4 days of hearings by the OTA Board on the development and practice of the technology assessment concept and use of the results of technology assessment in decisionmaking in business (academic research institutions, and Government). OTA-X-41, December 1976; v, 391 pages. NTIS order #PB 273 435; $28.50.

Technology Assessment at the National Science Foundation

Consists of the record of 2 days of hearings held by the OTA Board in June 1974, on the National Science Foundation's technology assessment program.

Technology Assessment Activities of the National Science Foundation. OTA-A-2, June 1974; iii, 673 pages. NTIS order #PB 248 382; microfiche only; $4.00.

Administrative

Informational Brochure

States OTA's purpose, outlines its organization, and describes some of its projects completed or in progress.

What OTA Is, What OTA Does, How OTA Works. OTA-PC-104 (Revised March 1983); 16 pages. Available free from OTA Publishing Office.

Assessment Activities

Lists and briefly summarizes OTA's current projects, publications in press, recent publications, and selected publications of interest (updated periodically).

Assessment Activities. OTA-PC-105 (Revised February 1983); 44 pages. Available free from OTA Publishing Office.

Annual Reports

The Annual Report presents detailed assessments of the work accomplished by OTA in the preceding year, including a review of management and administrative functions. Of particular importance is a thorough report on the various studies produced by OTA and specific indications of their implications for the technological community. Indications of work in progress are provided and remarks from the OTA Board are included to indicate the extent of congressional oversight.

Annual Report to the Congress for 1982. OTA-A-208, March 1983; iv, 128 pages. Available free from OTA Publishing Office.

Annual Report to the Congress for 1981. OTA-A-149, March 1982; iii, 109 pages. NTIS order #PB 82-202 862; $12.00.

Annual Report to the Congress for 1980. OTA-A-131, March 1981; iii, 104 pages. NTIS order #PB 81-189 748; $12.00.

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Annual Report to the Congress for 1977. OTA-A-68, March 15, 1978; iii, 98 pages. NTIS order #PB 284 942; $10.50.

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Annual Report to the Congress: March 15, 1976. OTA-A-31, March 1976; vii, 106 pages. NTIS order #PB 253 989; $12.00.

Annual Report to the Congress: March 15, 1975. OTA-A-6, March 1975; vii, 75 pages. NTIS order #PB 244 833; $9.00.

Annual Report to the Congress: March 15, 1974. OTA-A-1, March 1974; vii, 37 pages. NTIS order #PB 246 191; $7.50.

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